# The Journal

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# SMALLPOX.

W. L. WARRINER, M.D.

Read before Shawnee County Medical Society, March 3, 1902.

The secretary of the Shawnee County Medical Society a few days ago requested me to write a paper for tonight, saying that all other members had previously done so. I hardly knew whether to take it that I was a forlorn hope to fall back on or whether he desired to reserve the best until the last. However, I wish to say a few words on the threadbare subject of smallpox. What I may say will in no way reflect on any member here as I have the greatest respect for every member of the society.

I do not pretend to be a good diagnostician. In fact I am a poor one, save in some diseases in which I have had quite an experience. No time will be consumed in discussing the cause, symptoms or treatment of the disease under consideration, but the diagnosis will be considered.

Soon after the Spanish American War there was spread throughout this country an epidemic of smallpox. It was not Cuban smallpox nor Cuban chickenpox, nor Cuban itch nor chickenpox but plain smallpox or variola. To be sure there were some cases of chickenpox prevalent at the same time as there always has been, especially among children. I can not understand how any physician of fair intelligence can make a mistake in the diagnosis of a well marked case of either variola or varicella as has been so frequently done of late. Of course in early stages of either disease it may be difficult to decide but I am speaking of well developed cases. I was hasty enough to decide that a man with measles was developing smallpox which caused considerable trouble.

A few authorities, as Hebra, continue to maintain the identity of the two diseases under consideration, but the well known proofs that they are separate and distinct diseases are the following:

1. Epidemics of the two appear separately.
2. Having one does not confer immunity from the other.
3. By the uniform failure of attempts to produce variola by inoculating varicella or vice versa.

Now as to the difference on inspection. Chickenpox is characterized by the eruption of vesicles containing nothing but water or serum, it might be called; no pus being ever found in them and no pitting or umbilication present. Smallpox vesicles on the other hand may at first give the appearances of being but watery vesicles but later invariably contain pus and most of them become umbilicated. These

differences I have never failed to find. I have been called to see cases of the mildest type of chickenpox in a child with not a pustule on the body, only a few watery vesicles being present and another highly educated physician and a successful one, had called it smallpox, a diagnosis which was later shown to be incorrect as no other member of the family had it. I have also seen confluent cases of smallpox which had been called chickenpox.

Chickenpox vesicles contain no pus and collapse on pricking. Smallpox pustules do contain pus and do not collapse on pricking. Chickenpox vesicles are not umbilicated while the majority of smallpox pustules do become umbilicated. Have been interested in discussion of vaccination. I am a firm believer in vaccination. Klein case when a beginner in Ft. Scott convinced me of the efficacy of the method. I am a firm believer in vaccination and have been very much interested in the articles by Drs. Eastman and Harding on that subject.

An instance in the first year of my practice in Ft. Scott, where I was fortunate enough to have had a large experience with smallpox, convinced me of the efficacy of vaccination.

Being called to see Mrs. K., a patient with a high fever and suspecting smallpox owing to the prevalence of an epidemic at that time, I immediately vaccinated the husband and little boy. At the proper time a vesicle appeared on the boy's arm but the father's did not take and in about ten days from the wife's first high fever he came down with smallpox. There the father lay with confluent smallpox nearly dead with the disease and scarred for life while the boy played about the same room perfectly well and with but one pustule on the arm, the vaccine pustule or vesicle.

I believe the present mildness of the disease is due to sanitary means and vaccination in the past.

The discussion of the sanitary measures and isolation I leave to those more experienced along those lines.

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## REPORT OF A CASE.

J. E. MINNEY, M.D.

Read before Shawnee County Medical Society, March 3, 1902.

Mr. W. H. W. was sent to us February 19th, 1902, with eye trouble. He is 37 years old; an American; married; and a baggageman at the present time. He has been a brakeman.

Present history—He noticed a dizziness in his eyes about ten days ago. He thought he was bilious and used cartharsis freely without benefit. About eight days after his first dizziness he noticed his right

pupil dilated. He made another run of two days but his eye got so bad he could not work any longer. (No pain). His sight "flickered" or would "go and come." This was caused by the dilation and contraction of the ciliary muscle and iris. Examination: His right pupil was dilated but not to the maximum. Distant vision in O.D. 16-xvi. There was no tendency to contraction of the pupil as he faced the window-light. The distant vision of his left eye was 16-lxx. A .75 spherical enabled him to read 16-xl, in the distance but no further improvement could be made. With his left eye he could read the finest print 12 inches, .05 print. There was no scotoma and his color sense was normal. He had no bright flashes in his eyes or black specks.

He gave a history of two severe headaches since the first of the year which was unusual for him. These headaches came on a month before his eye trouble. They awoke him about 4 A.M. He retired at 12 M. midnight. One severe attack came on one afternoon. His family history is good. He suffered with rheumatism when eight years old, having to stay in doors all winter and his right knee was swollen and painful.

He has had pain from his knees down from the first of the year and suffered with cold feet. This pain and coldness of the feet has increased until the past four or five days. He has been taking kalium since February 20. There has been a tendency of the right leg to cramp and go to sleep. During the time mentioned he could not keep his feet warm to keep the pain down until the time heretofore mentioned.

He gives a history of both specific diseases (gonorrhoea and syphilis) in 1889. He says there is no stricture and he got entirely well. He took medicine about one year and has not taken medicine for that trouble since, although he has had a kind of grating rheumatism occasionally ever since. He was put on the following prescription:

℞ Kalii Iodide ..... ℥i
Tr. Gentian Comp ..... ℥iv
Aquæ Dist. ..... q. s. ..... ℥iv

M. Sig. Take twenty drops (five grains) in water after each meal increasing the dose two drops each time until sixty drops are taken at one dose. He had increased the dose to sixty-six drops Sunday morning and his breath and the appearance of his tongue warned us to quit off for two or three doses.

He has been troubled a great deal with his stomach and his digestion has been poor for some time and we hesitated to put him on large doses of kalium. But we found that it agreed with him and up

to fifteen grains three times a day he improved in appetite and his stomach gave him no trouble and he felt better in every way, except there was and is more or less blurring of sight. Locally we put two or three drops of eserine in his right eye, (one grain to one ounce of distilled water) morning and evening. It always contracted the pupil to normal or a little more. The contraction always came on at the usual time from fifteen to twenty minutes. At first the effect passed off within three-fourths to half an hour. But during the last few days the time has been lengthened to three hours and some effect remains much longer.

The question is, what is the poison causing this trouble, and where is the lesion? He gives a history of rheumatism and that might cause the trouble. The treatment is equally effective in some forms of rheumatism. We are inclined to the opinion that it is a case of syphilis. It is interesting to note the length of time from the initiatory lesion and the comparative freedom from any sequela for years. It is also interesting to note the first outward symptom was a paresis of the third nerve supplying the circular muscle fibre of the iris of the right eye.

Stimulation of the sympathetic nerve which supplies the iris will cause dilation of the pupil. Paralysis of the branch of the third nerve supplying the iris will cause dilation of the pupil. Which is this and to what extent is it involved? We believe this is a paresis, not a complete paralysis of the branch of the third nerve supplying the circular fibres of the iris of the right eye. If the paralysis was complete we do not believe that the eserine would stimulate the third nerve to contract the iris. There is not a maximum dilation even when the third nerve is paralyzed. A maximum dilation is obtained only when the third is paralyzed and there is a full stimulation of the sympathetic. Hence we conclude that it is the branch of the third derived from the lenticular ganglion that is involved. The more recent history of a specific trouble than that of rheumatism, the time the pains come on, after midnight, the parts affected, together with a relief from the pain and a gradual improvement in the eye symptoms and tolerance of such an irritant as the kalium by an irritable stomach, incline us to the belief that the trouble is specific. There are other causes that will produce dilation of the pupil such as blows on the eye-ball, exposure, and medicine, but these, we think, have been or can be excluded.

In March, 1894, he was caught by the head, between two cars in making a coupling. His left ear was torn off and the surgeon replaced it. The soft tissues of that side of the face were torn off but he thinks there was no fracture of the skull. He was not rendered unconscious and was ready for duty in four weeks.

## SHAWNEE COUNTY MEDICAL SOCIETY.

The Shawnee County Medical Society met in the parlors of the National hotel Monday evening, March 3rd. There were present Drs. McVey, Adams, Wallace, Church, N. J. Taylor, Magee, Davis, Minney, Miner, Eastman, Wehe, McGuire, Warriner, McClintock, Brockett, W. E. McVey.

Dr. Warriner read a paper on "Smallpox" (see page 291).

DISCUSSION.

Dr. Eastman: I think all physicians believe in the efficacy of vaccination. If the vaccination is repeated until immunity is established the protection afforded is equal to that of smallpox itself. When the epidemic first appeared here the diagnostic points usually found as suggested by the author of the paper, were absent. There was no umbilication, no secondary fever, or none of the distinguishing features of smallpox.

Dr. Davis: In the smallpox cases here men of wide experience have been unable to make a positive diagnosis on the first visit. There have been no positive signs upon which a diagnosis could be made. There have been departures from the normal types of both diseases.

Dr. McClintock reported his experience in a former epidemic, as a member of board of health; succeeded in stamping out the disease by a very rigid quarantine. Don't think such a system could be followed now or that it would succeed as well. Kept a record of cases of smallpox with reference to vaccination and his experience was not very favorable to the idea of protection by vaccination. He found some of the worst cases had been vaccinated and that as many vaccinated cases had the disease as those who had not been vaccinated. Had two fatal cases that had been vaccinated, afterward had had smallpox and were badly pitted, then were exposed and had confluent smallpox and died. Did not, however, consider this experience sufficiently large to combat the general experience of physicians and still believes in the efficacy of vaccination and practices it. The antiseptic precautions used in preparing the vaccine and in the vaccination wound may weaken the effect of the vaccine.

Dr. R. E. McVey: Smallpox and chickenpox are both germ diseases and we may have an association of the two germs. We may have at first a chickenpox eruption followed by a smallpox eruption. The smallpox eruption may first appear as an erythema on some part of the body and here there will be no pustules. Pustulation is due to streptococci and may occur in either disease if the streptococci are present. It may be prevented by the early use of alcohol or bichloride of mercury.

Dr. McGuire: Diagnosis is not always easy. The dividing lines are sometimes imaginary. Many of the distinguishing points formerly claimed could not be made out in these cases. Referred to reports on the subject of vaccination which showed that in a very large experience covering a large territory made up by a number of physicians, protection was conferred by vaccination.

Dr. J. E. Minney presented a case and read a report of the same (see page 292).

In the discussion of the case Dr. R. E. McVey said: The average time of the appearance of lentercular syphilide is 8 years. In the brain the tissue changes may appear 20 years after the initial lesion. There may be blocking of a blood-vessel or the thickening may occur in the ganglion cell. Some benefit may be derived from the administration of iodides.

## MISCELLANEOUS.

### TREATMENT OF CHRONIC ROUND ULCER OF THE STOMACH.

G. Fuetterer, Chicago, outlines his treatment as follows:

1. If we diagnose an ulcer of the stomach, or if, in the absence of convincing symptoms—which are so often lacking—we have cause to suspect an ulcer, we must at once ascertain the percentage of hemoglobin.

2. We advise the patient to go to bed, either in a hospital or at home, employing the services of a trained nurse.

He prepares beef juice in the following manner:

1. Order five pounds of finely-chopped round steak, to be brought at 8 o'clock every morning, or keep it in an ice-box from the day before. The fat should be removed before the beef is chopped.

2. Mix the meat with a teaspoonful of salt, and put it into the upper part of a double boiler. Cover without adding water.

3. Fill the lower part of the boiler with warm (not hot) water.

4. Keep the boiler on a kitchen stove for four hours, keeping the water in the lower part of the boiler just warm, so a hand can be placed on the latter without burning it. This will do, as a rule, but the use of the thermostat, regulating the temperature to 120° F., gives more uniform results.

5. Turn the beef every hour.

6. After four hours press out the juice with a potato-masher, spice, and let patient drink it in two portions, one-half at dinner and the other half at supper.

Five pounds of beef yield about a pint of juice, which will necessarily have to be taken in one portion at supper, if the patient works during the day.

In other cases, one-half should be taken at noon and the other half at supper. The juice should be of a roast-brown color.

After the percentage of hemoglobin has become normal, the patient should have nothing to eat or drink for from two to five or six days. During this time the teeth must be kept very clean, and a good mouth-wash must be used often.

Rectal nourishing enemata may be given twice a day, preceded by a cleansing enema. Not more than one cleansing enema should be given before the food is injected. The nutritive enema may consist of one egg, five grains of pepsin, eight ounces of normal salt solution and a glass of claret mixed.—Jour. A. M. A. Jan. 11, 1902.

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## EXPERIMENTAL INOCULATION.

Almost one hundred years ago, the Boston Board of Health erected a hospital at Noddle's Island, and appointed a number of physicians to pursue a series of experiments to determine the value of vaccination, which had been introduced but a few years before. On the sixteenth and nineteenth of August, 1802, nineteen boys were inoculated with vaccine matter. The operation was successful in every case. On the nineteenth and twenty-first of November, these nineteen children, together with one who had been vaccinated two years before, were inoculated directly from a smallpox patient; the arms became slightly inflamed, but no constitutional symptoms developed. At the same time two boys who had neither had smallpox nor been vaccinated, were inoculated from the same smallpox patient; these two boys developed typical smallpox. When the disease was at its height in these two children, the twenty boys were again inoculated from them; they were also exposed to infection in the natural way by being constantly in the same room with the two boys, but in none of the twenty did the disease appear. The physicians certify that the experiment is satisfactory evidence that the "cowpox is a complete security against the smallpox."

Again, in 1808, the Massachusetts Medical Society appointed a committee to study the subject, for the operation had not gained rapidly in favor. The report was published in the Society's "Communications," Volume I. It concludes that vaccination affords as complete a protection as smallpox itself, but advises revaccination as a test of the satisfactory result of the first operation.

It is well for the profession to keep this experiment in mind, an experiment possible then when inoculation directly from smallpox patients was still practiced. If statistics may be questioned, if our opponents will not accept the evidence gained in countries where vaccination is general because compulsory, it would seem that the result of this experiment is unquestionable. Here we have the tangible experimental proof of the protection afforded by vaccination. How do our friends, the antis, interpret this result? Perchance they have never heard of it, nor of Jenner's own similar experiments. It is discouraging to think that the profession, with all the advance it has made, must still labor with a public no more susceptible to truth than the public of a century ago, when the opponents' chief argument was that the operation was new and untried.—American Medicine.

## AN INTERESTING ACCIDENT OF STAINING.

J. O. Cobb (Medical News, Nov. 2, 1901) comments as follows: In the winter of 1898, while working with a mount of sputum, I used as a contrast stain methyl instead of methylene blue. In this amount I noticed a rod about three times the size of the tubercle bacillus and shaded light lilac. In other mounts the rods were constantly present in various sizes, but I paid little attention to them, thinking they were accidental air bacilli. Later, at the Sanatorium at Fort Stanton, New Mexico, I showed these rods to Assistant Surgeon Ramus, who undertook to isolate them. He could never demonstrate them except with the methyl-blue stain and if this were true it was certainly interesting and such a rod, if a bacillus, should be isolated and classified.

In going into the matter thoroughly it was found to be a crystal of the stain. It was noticed that the presence of carbolic acid and heat produced beautiful crystallization and fresh preparations of the stain gave crystals much more uniform in size and much smaller than in old preparations. The crystallization seems to take place only in the presence of an albuminoid substance.

Incidentally in regard to staining sputum it is well to again call attention to the accident of staining with Sudan iii. I acknowledge that it is a good stain for the tubercle bacillus, but it is unreliable. Several have called attention to the crystals found in the mount from this stain; and where we have sputum of a doubtful case Sudan iii. must not be relied on, for it deposits crystals that very closely resemble the bacillus. I have in mind one case with temporary cold and expectoration which was stained with Sudan and it was thought that bacilli were present, but staining with all other methods, cultivating and running through guinea pigs were negative.

It is well to repeat the warnings that laboratory workers have given against the accidents of staining from old preparations of gentian-violet, methyl-violet, Rosaniline and Sudan iii. In sputum work especially must we use care with these stains. In well-marked cases where the bacilli are plentiful it makes no difference, but where the infection is recent and the diagnosis hard to make we should be prepared to exclude all sources of error and avoid any confusion by being able to say positively that we have, or have not, a tubercle bacillus in the field.

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## THE CURE OF CHRONIC BRIGHT'S DISEASE BY OPERATION.

G. M. Edebohls, New York, first detailed the principles underlying the cure of chronic nephritis by operation and the method of operation in the Med. Rec. of May 4, 1901, and in the present paper discusses more fully his position in regard to this question. The essential points in the histories of all the cases which he has treated by operation are outlined in tabular form, and from these some deductions and general considerations are drawn. In all, eighteen patients were operated upon, all women, varying in age from nineteen to forty-five years. Cases of chronic Bright's disease only are included in the list. A detailed account of the operation of nephropexy as performed by the author will appear in the near future. Thus far there has been no mortality in any of the cases operated upon. All of the patients recovered from the operation, and all but two are still alive. The author believes that arterial hyperemization of the kidney is the basic factor underlying the subsequent changes which result in a cure or improvement of the disease after operation. That this occurs has been shown by subsequent operation in three cases in which nephropexy had been previously performed. The increased and adequately maintained blood supply to the kidney, established by the operation, leads to gradual absorption of the interstitial and intertubular inflammatory products and exudates, thus freeing the tubules and glomeruli from external compression, constriction, and distortion, and permitting the re-establishment in them of a normal circulation. This results in the regenerative production of new epithelium capable of carrying on the secretory function. In conclusion the author states that it is his belief that chronic Bright's disease is curable by operation, but that the present state of our knowledge does not warrant us in accurately defining the limits beyond which operations can no longer avail.—N. Y. Med. Rec., Dec. 21, 1901.

# OBSERVATIONS OF SEVEN YEARS' USE OF CREOSOTE IN PNEUMONIA.

J. L. VAN ZANDT, M.D., FT. WORTH, TEXAS.

Read before the Southwestern Tri-State Medical Association at Dallas, Texas.

When I left college in 1866. I had been taught that the proper treatment of pneumonia was by means of blood letting and tartar emetic in the first stage, and, later, calomel and blistering. Nothing or but little was said of the "vis medicatrix naturæ," and when Jim Miller, about four miles north of Dallas, got well, I congratulated myself that I had cured one case of pneumonia.

Within a year or two I read a work on practice, by J. Hughes Bennett, of Edinburgh, in which he had laid great stress on feeding and gave but little medicine, but yet his mortality was much less than I had seen elsewhere reported. Later I read a little work, "Nature and Art in Disease," by Sir James Forbes. Then it dawned on me that a large per cent. of cases would get well with or without medicine if we could only keep them alive long enough. In other words pneumonia was a self-limited disease and would run its course if not interrupted by death.

It is true I gave medicine from the beginning of the attack, hoping to modify the disease, though I had no hopes of aborting it or materially shortening its course. For a long time I gave carbonate of ammonia to all cases, and, later, except in asthenic cases, I gave salicylate of ammonia. I believe the disease was distinctly modified by these remedies. Not until long after I began the use of salicylate of ammonia did I know that the salicylates had been vaunted as a specific in the disease. I did not give in sufficient doses for this and so got only a modifying effect. I believe that measles was about as amenable to an abortive treatment as was pneumonia.

So you will see I was not looking for a cure for pneumonia when I gave creosote to my first case, one with an enteric complication, and was as much surprised as anyone at the result.

A shrewd aunt of mine said, when I was a small boy, that I would learn better from observation than from books. From books I learn that pneumonia is a self-limited disease and must run its course. From observation I learn what is "better," that in a large per cent. of cases creosote has a decidedly curative, I might say, an abortive effect.

In a former paper (N. A. Med. Record, March 30, 1901), I gave extracts from a number of writers who enthusiastically claimed the curative effects of creosote in pneumonia, also reported sixteen consecutive cases of my own, treated during the winter of 1899 and

1900, of which four were dismissed on the second day, five on the third, and one on the fourth, (10 or 62½ per cent. by the end of three days), one each on the fifth, sixth, seventh and eighth, and two on the tenth days. Since that time I have lost only one case. That I shall mention later.

As further evidence on the curative effect of creosote, I will give some extracts from personal letters received since my last paper was written. Prof. Andrew H. Smith, of New York, says: "I have long felt that in all probability, the pneumonia of crisis belonged to the infection with pneumococci, while lysis indicated a mixed infection. This applies, however, only to cases not treated with creosotal or other germicide. I believe such treatment is capable of causing an early lysis, before the time for crisis arrives, say by the second or third day the fall would begin. I have seen many such cases, and have rarely seen a crisis when the remedy was begun early."

Dr. A. H. Davidson, of Boerne, Texas, says: "I saw your first report on creosote in pneumonia (1898) and since then have used it in all cases with good results."

Dr. Emma H. Yates, of Ander, Texas, says: "You taught us that creosote gave startling results in pneumonia, and I have certainly found it so. I have been agreeably surprised that my patients did so well. I seldom needed to make a second visit. At first I doubted my diagnosis when they recovered so speedily, but I could not confirm my doubts. I was positive the diagnosis was correct." Having to make long long trips to the country, she says she left medicine with instructions to send report the next day, and reiterates that she seldom had to make a second visit. She had been practicing only two years and had only ten or a dozen cases, but had been well pleased with results in all.

May 11th, about six weeks after the publication of my last paper, Dr. Geo. H. Sanborn, of Hennicker, N. H., wrote to "personally thank" me for it. The day after reading the paper he sent to Boston for the carbonate of creosote, and in a few days was called to see a lady æt. 45, sick two days, pulse 120, respiration 40, and temperature 105, with rusty sputum. He gave creosote carbonate and went back next day and dismissed his patient, thinking he had made a mistake in diagnosis. He was called back the same evening to find the symptoms as bad or worse. He resumed giving the creosote and had a speedy recovery. Further, he says he had treated three other cases, all getting well, in a very short time. The last case was a man 50 years old, temperature 105, respiration 50, and pulse 140, "raising large quantity of rusty sputum." This was the evening of the first

day's illness. He gave creosote, and at his visit the next morning the wife met him at the door and said, "Well, Doctor, I guess you made a mistake about that being pneumonia. My husband is all right this morning and is hungry." The Doctor, to use his own words, "did not propose to run any chances and did not omit the medicine," but continued it for three days at longer intervals, and the patient was at work in a week. He then goes on to contrast this with his former experience and with the teaching of the books.

It will be noted that my report of cases shows an uneveness of results, 25 per cent. of cases being dismissed on the second day, 21 per cent. on the third day, and yet 12½ per cent. went on to the tenth, though in all the protracted cases the disease was distinctly modified.

One writer says: "When given early in the attack the results are almost specific." While admitting the beneficial effects of early giving, I have seen as decided effects when given later, on all symptoms save the color of expectoration, as when given early. It has occurred to me, from my own and the observation of others, that the difference of results was due not so much to the time of giving as to the difference in the infecting micro-organism. I have been impressed with the idea that the pneumococci infected were the most amenable to treatment, but a lack of microscopical equipment has prevented me from putting this impression to the test.

Since I began using the carbonate of creosote, October 29, 1899, I have had but one fatal case of pneumonia. That was April 7th, last, and to that patient the carbonate of creosote was given early and freely and seemingly with no effect whatever. This case, while in a measure having the appearance of an ordinary attack of lobar or croupous pneumonia, had some very peculiar features. He was taken with a chill about 3 A.M. I saw him six hours later. He had pain in the side and cough and was expectorating a rust colored sputum. I diagnosed a pneumonia but did not at the time locate the pulmonary lesion. Later, however, I found the posterior part of the left lung involved from top to bottom, while the anterior part and the whole of the right one seemed to be entirely free from disease. These conditions continued throughout the attack, which lasted almost twenty-one days. All of this time could be heard posteriorly, tubular breathing, associated with fine and course crepitation. The expectoration varied very little.

In May last, while on a visit to Marshall, Texas, at my suggestion Dr. J. F. Roseborough gave carbonate of creosote to a very irregular case of pneumonia, and though the patient recovered. I am very sure the creosote did not help him. About the same time this patient was

convalescing, a brother was taken sick, and after five days of high fever developed pneumonia symptoms. This patient, though given carbonate of creosote freely, died.

The conclusions I have reached are these: A large per cent. of pneumonic cases are cut short or aborted, almost all the rest are mitigated, and the remainder, a very small per cent., are not at all affected by the remedy.

I have been thus particular to dwell on these unfavorable cases for two reasons. Honesty requires it, and should one of you who has not already done so, be disposed to try the creosote and first find one of the non-yielding cases, he might be disposed to discredit the whole thing.

As illustrated in Dr. Sanborn's first case, it has been found that the medicine must not be omitted so soon as active symptoms have subsided, because there will almost surely be a recurrence, as I have known quite a number of times. The medicine should be continued in less quantity or greater intervals for at least three days. In bronchopneumonia a longer time is generally better.

A few words with regard to the particular preparation and dose and I am done. My original formula was made by adding one drop of creosote to my then common dose of seven and a half grains of salicylate of ammonia. This combination I continued to use in most cases till 1899. In some, creosote was given without the salicylate, because of great prostration or gastric irritability. I lost as I now remember, two cases of my own, and two turned over to me "in extremis." Some of these I think might have been saved by my present medication.

In 1899, I read an abstract of a report of a case treated with carbonate of creosote, by Cassoute, of Marseilles, France, and as it furnished an easy and pleasant way to increase my dose of creosote, I at once adopted its use and have found no difficulty in giving it in any desirable dose to any patient. It is almost devoid of taste and odor and may be given in emulsion or stirred in hot sweetened water to be taken during agitation as it does not dissolve. The emulsion is an ideal way particularly for small children. Do not mix with alcohol or acids, as these will develop the taste and odor of creosote.

It may be asked, may not guaiacol or its carbonate be used instead of carbonate of creosote. I think not. Thinking to test the matter I gave thiocol, a preparation of guaiacol, in one case, but my patient grew steadily worse as the disease advanced, until, after about three days, I substituted carbonate of creosote, and in twenty-four hours a marked mitigation of symptoms occurred. I have not had the courage or disposition to experiment further.

Dr. W. A. Vaughn, of Virginia, writes me that he has treated a number of cases with guaiacol or its carbonate and saw no material difference between them and cases treated expectantly.

Prof. W. O. Bridges, of Omaha, Neb., gives a clinical report of cases treated with carbonate of guaiacol in which results were nothing like so favorable as I have seen and others have reported from carbonate of creosote.

I am aware that some gentleman, whose name and address have escaped me, has reported quite a number of cases treated with the two remedies indiscriminately and without noticeably different results. He spoke highly of the treatment.

Dose: To an adult I have been in the habit of giving seven and a half to ten grains or minims every three hours, in urgent cases giving the dose more frequently for a few times. Some have recommended one dram night and morning, while others have put the daily amount at two and a half to three drams. Dr. Sanborn, whose report of cases I have given, gave one drop every hour. It may be that some of us are giving more than necessary and that better results may be had by giving smaller doses at shorter intervals. In some cases I formerly got good results from one drop of creosote alone every three hours.

Ordinarily I use the carbonate of creosote without other medication. I never use expectorants or nauseants. Occasionally a few doses of anodyne are given in the beginning of painful cases, and strychnine where indicated.—New England Medical Monthly.

## THE TREATMENT OF SEVERE DIPHTHERIA.

John Biernacki (Edinburg Med. Jour., Nov., 1601) says the principles of treatment are as follows:

1. To keep the local lesion clean, and so far as may be, free from secondary microorganisms.
2. To neutralize the toxine.
3. To counteract the toxic relaxation of the vessels with the primary fall in blood pressure.
4. To avoid heart failure.
5. To maintain the temperature.
6. To encourage renal excretion.
7. To prevent or allay vomiting.
8. To hinder if possible the development of grave paralysis.

The treatment of the local lesion: Generally speaking, the degree of toxemia is proportionate to the extent and thickness of the mem-

branous exudation. In cases of pharyngeal and nasal diphtheria the best local treatment is to wash out the affected cavities periodically. In hospital, this is commonly done with boracic lotion, a glass syringe being used. For children who struggle, a 4 ounce ball-syringe is preferable, as the hand, when holding it, more easily follows any movement of the head. The beneficial results of this treatment are, that the cavity is kept clean, and septic organisms are washed away from about the lesion. It is also a great practical gain that the period of infectivity is distinctly shortened. Boracic lotion very occasionally has an irritating effect on the mucous membrane of the pharynx, which remains sore, raw and bleeding until the treatment is stopped. In these cases salt solution may be substituted. It has been alleged that syringing increases the chance of otitis. Comparative observations made do not confirm this. The spray as a substitute for the syringe is ineffective.

The treatment of secondary streptococcal infection. Strictly speaking the consideration of mixed cases of infection is foreign to the subject of this paper. Such cases, however, are too common to be entirely ignored. While the weight of clinical evidence is in favor of the view that unmixed cases are the graver, the additional infection has, of course, its danger.

The neutralization of the toxin: Antitoxin probably produces its effect by combining with the toxin to form a neutral substance. Consequently the blood pressure rises. Under specially favorable conditions the extent and rapidity of the rise is remarkable.

If antitoxin could always be given in an adequate dose before the specific poison had initiated cardiac degeneration there is weighty reason for believing that further treatment would be of very minor importance. Statistics, as shown by the vaccination controversy, will not convince the prejudiced; but the figures published from time to time of the results obtained with diphtherial antitoxin are sufficiently significant to convince those who keep an open mind.

In spite of the efficacy of the antitoxin treatment under suitable conditions there is room for supplementary methods. Indeed, the necessity for them remains as great as ever, because inadequate and late doses of antitoxin enable many cases to survive until the third and fourth stages, without protecting them from the dangers involved. This is the probable explanation of the recent greater frequency of death from gradual heart failure, and the increased incidence of paralysis among cases treated by antitoxin.

Treatment other than antitoxic, directed against the primary fall in pressure: The object is to prevent physiological disturbance resulting

from the fall in pressure, and especially to maintain the free excretion of urine. Strychnine must be placed first among the remedies in this stage. It should be given at the very outset. The power of preventing cardiac degeneration in febrile diseases has been attributed to it. In diphtheria it may indirectly have this effect if it improves the tone of the arteries, and by raising the blood pressure, aids the excretion of the toxin. Using hypodermic tabloids which contain 1-120 of a grain, he prescribes a quarter four-hourly for a young child. Next in merit comes caffeine, which has been stated to cause an increased flow of urine as a special local effect. Digitalis is dangerous. Its cumulative effect is felt in the following stage when an increase in peripheral resistance may be a factor to the failure of the ventricle. It is a point in treatment that sudden movement or exertion is inadvisable even in this stage if the type of the disease is severe.

The treatment of heart failure, with the secondary fall in pressure: The secondary severe fall in blood pressure, from failure of the ventricle, is of course dangerous, and treatment calculated to increase it cannot be adopted with impunity even when the object is to relieve the strain on the ventricle. Some years ago he prescribed nitroglycerin to relieve exceptionally early and severe anginal oppression, and the alarming effect was one of the considerations which drew his attention to the important part played by a fall in blood pressure in the diphtherial morbid condition. On the other hand, the blood pressure cannot be safely raised, because the dilated ventricle is already working with difficulty against the low tension in the aorta. From this it follows as an important practical point that methods which raise the blood pressure by constricting the vessels, although they may be beneficial in the second stage, may cause death in the third. Digitalis has been mentioned in this connection. Although its action has been stated to be partly cardiac, it only produces a slight increased tonicity of the pulse, followed by accelerated failure of the ventricle. Saline infusions are also dangerous at this time, because they cause not only a distinct but a quick rise in pressure, during which the ventricle may fail. What then can be done for the patient? Alcohol is here the chief agent and should not be given earlier. He generally prescribes 1½ oz. as a minimum quantity for a small child. This is given in two hourly doses with the feeds. If there are successive critical attacks of syncope, ether and a hypodermic syringe are kept by the bedside. When the failure of circulation is marked the lower end of the bed is raised about a foot by means of wood blocks. In those cases where gradual recovery occurs and the heart is once more working satisfactorily it must not be taken that the

ventricle is in its normal condition—the patient is at rest and there may also be the favoring condition of a blood pressure still somewhat below normal. Before allowing the patient to sit up, the heart should be carefully examined for dilatation, and even when none is found ordinary methods of life ought only to be resumed gradually and with caution in regard to sudden movement and exertion.

The treatment of apyrexia: Wrapping the patient in blankets and the like is useless. There must be an actual application of heat to the surface of the body, as by a number of hot bottles. In a critical emergency the best result is obtained by holding blankets close to a fire and using them as hot as possible, in frequent relays. Owing to the low vitality of the cutaneous tissue when the fall in blood pressure is severe great care must be exercised in employing even moderate heat, or an injury in every way comparable with a burn may be caused.

The treatment of oliguria and anuria: Some of the measures mentioned under other heads are indirectly relevant in this regard. In all severe cases the quantity of urine passed daily should be charted. An almost certain but restricted prognosis can be based on the record, for so long as the urine is not running down in quantity very markedly the patient is safe. Exceptions are very rare. When only a few ounces are passed in the twenty-four hours he orders a very large poultice to be applied to the loins night and morning. If no effect is produced and the condition of the heart warrants it, the advisability of a saline infusion may be considered.

Dietetic treatment and the prevention of vomiting: Persistent vomiting associated with cardiac dilatation is with good reason dreaded in severe diphtheria. It is a condition that will tax every resource of the practitioner and also the patient skill of the nurse. The cardinal point is, that the vomiting deprives of water as well as nourishment; vomiting is therefore a potent factor in the causation of anuria. Cases for dietetic treatment may be divided into several classes:

1. Those in which there is both persistent vomiting and diarrhœa. Here, administration of food being impossible either by mouth or rectum, the only available measure seems to be the subcutaneous infusion or injection of saline solution. Use repeated small injections (in order to avoid a sudden rise of blood pressure) in one case.

2. Those in which water only is retained by rectum. Order 1 pint of water at blood heat to be given by the gravitation method, through a soft rubber catheter passed well up the rectum.

3. Those in which nutrient enemata are practicable, while even water by mouth is still rejected. Under such conditions he commonly prescribes over-syminized milk or bovril; four ounces six-hourly is the

usual quantity given in the same way as the water. After twelve hours or longer a few drops of water are tried by mouth, and if retained the quantity is gradually increased.

4. Those in which a sufficiency of water—say 5 ozs. two-hourly—is alone retained by mouth. Hard, syminized meat suppositories are ordered four-hourly. They are more certain of retention than any of the other kinds he has tried, and are less seldom rejected than the enemata.

5. Those belonging to the last class who have retained several feeds of water. Half an ounce of syminized milk is added to a feed, an equal quantity of water being withdrawn. The proportion of milk to water is then gradually increased until the patient is taking ordinary syminized milk, when the suppositories are discontinued. In making a step upwards from water whey is sometimes used with success. In other cases junket is given at times, as distant as possible from the water feeds. Beyond milk, the first addition is generally Benger's food, which is partly digested during preparation.

It is to be remembered that vomiting in diphtheria tends to persist. When a case is doing well and some dietetic error induces sickness it may be necessary to go far down in the scale outlined before anything is retained and it may take days to recover the lost ground.

Too much stress connot be laid upon the importance of nasal feeding in severe cases, when the patients do not take sufficient food or fluid. It is not too much to say that every second infant not nasally fed receives an insufficient quantity of both. For nasal feeding a No. 6 soft rubber catheter should be used, with a glass funnel, as in washing out the stomach. The point of the tube should be at least half way down the esophagus when feeding is commenced. For nasal feeds milk should always be predigested.

The treatment of paralysis: Medicinally, very little can be done. Strychnine by hypodermic injection is a common prescription and, later, galvanism is used. When there is difficulty in swallowing or the patient coughs on or after taking liquids or solids, nasal feeding should be immediately adopted and continued until the condition has passed away. One other point may be emphasized. During the earlier part of the stage of paralysis, even if it be slight, localized and stationary, absolute rest should be the golden rule of treatment.

The first few days out of bed after a severe attack of diphtheria are the only safe test of complete recovery—not merely because paralysis may yet supervene or recur, but still more, owing to the possible resistance of latent heart weakness. It is a time when over-caution on the part of the medical adviser, nurse and patient is impossible.

## THE CLINICIAN AND THE HEMATOLOGIST.

B. M. Randolph, Jr., M.D., Philadelphia, Pa., in the Virginia Medical Semi-Monthly.

Perhaps no subject has been so abundantly discussed during the past year as the value of blood examination to surgery, and the discussion has too often degenerated into a sort of personal controversy between the surgeon and hematologist, with no little mutual recrimination. It has had, however, one advantage in that it has finally settled all argument as to the diagnosis of the presence of pus by the leucocyte count. It was formerly claimed that the presence of pus was invariably accompanied by leucocytosis, and though this claim has long since been abandoned by those acquainted with the subjeet, the idea has been so firmly lodged in the minds of the general medical profession that it is still the principal point on which the discussions are based.

While it is well known that ordinarily the presence of pus will be accompanied by an increase of leucocytes in the peripheral blood, every surgeon of much experience can cite cases where a normal or diminished number of leucocytes are present, and where a subsequent operation has revealed the presence of pus. Some surgeons have claimed that the hematologist has in such cases made an incorrect diagnosis; and where the latter has accompanied the report by a diagnostic opinion, such a claim is unquestionably justified. The evidence obtained by the presence of a marked leucocytosis in such cases is very valuable, but conclusions cannot be drawn from a negative result.

There are several things which may modify the tendency of a suppurative focus to produce a leucocytosis. The human organism is not an instrument of precision made according to a fixed standard like a corrected thermometer; and this fact, as well as variations in the intensity of the infection, is to be taken into consideration. If the patient's resisting power is strong, the re-action to the iniection, as evidenced by the leucocytosis, is pronounced, and proportionately less as the resisting power is weak. Again, the infection may be so intense and overwhelming as to prostrate the patient before the reactionary forces can get into play. A parallel to this is the clinical picture presented by those fulminating cases of meningitis, which seem to strike the patient down as if by a blow. Again, in abscesses of long standing, well-walled off and permitting little or no absorption of toxic material, there is no occasion for leucocytosis, though it may have existed earlier in the disease. Further, though the normal

number of leucocytes in the peripheral blood of a healthy individual ranges from 5,000 to 10,000 per cubic millimeter, numbers of persons have been found, apparently in perfect health, whose leucocyte count was persistently as low as 3,000 to 4,000. As we have only limited opportunity of studying the blood of any but diseased persons, there is probably a considerable number of people having normally a lower number of leucocytes than what is considered the average. It will be seen at once that what would be considered a normal number of leucocytes would in such persons constitute a very decided leucocytosis.

A recent work on the blood by Dr. J. C. Dacosta, Jr., summarizes the discussion of the question as follows: "The presence of leucocytosis, especially if associated with hyperinosis" (increase of fibrin) "and a positive iodine re-action, is *suggestive of abscess rather than other lesions*" (italics the writer's). An absence of one or all these signs, on the other hand, is not sufficient to exclude pus."

There are very few diseases where even an exhaustive examination of the blood can absolutely establish a diagnosis—malaria, leukemia, and, generally, pernicious anæmia and chlorosis being the most conspicuous instances. But it is of absolute value in differentiating many affections, and an invaluable aid in studying the progress of numerous diseases, and hence in prognosis. There are comparatively few affections where a careful and intelligent study of the blood may not throw some light on the case. The value of its results are quite as decided as those obtained by examination of the urine, and its range of usefulness much wider. It requires skill, care and time, but an exhaustive examination of the urine requires quite as much. Hematology is a field where there is much to be learned, and, perhaps, some things to be unlearned. It has shed much light on the study of disease, and promises much more. One inexperienced in studying the histology of the blood would be surprised to know how much can be gathered from simply observing a slide of fresh blood, independent of counting cells, estimating hemoglobin, or differential staining of the corpuscles.

Those who have looked to the blood examination for immediate and exact information in certain critical surgical cases have been disappointed. Those who are looking for a sort of "diagnosis made easy" have also been disappointed. Acknowledging, as we must, the greater accuracy in studying disease furnished by it, it is not likely that this or anything else in the way of clinical laboratory methods will ever lessen the clinician's need of highly trained powers of observation, or relieve him of the responsibility of passing judgment on doubtful cases.

## SMALLPOX AND VACCINATION.

The recent experience of the smallpox epidemic in London is interesting in the support that it gives to the conclusions drawn by experiences in this city that while vaccination is not an absolute preventive of the disease, it goes a long way toward lessening its severity. In a recent issue of the London Times the history is given of 349 cases that were said to be "completed"—that is, an end of the disease had come either through death or recovery. There were at that time quite a number of persons in the hospitals whose cases had not been completed, but who had passed through the worst stages of the disease and were on the road to recovery. For this reason the percentage of deaths in the 349 completed cases is greater than will be found to be true when the contagion has been finally stamped out and all of the cases have been brought under a complete classification.

Another fact which has to be taken into account in this London experience is that there does not seem to have been there as much attention in the past paid to revaccination as in this country. It is said that the evidence regarding this is small, and that out of the 349 cases eleven patients were said to have been revaccinated at different times, and in six cases the operation had been performed after the patient had sickened of smallpox, or a few days before the eruption appeared. The outbreak of the disease led in London, as it did in this city, to a very general resort to revaccination, and probably the fact that the disease found lodgment was due not only to the number of persons who had not been vaccinated, but to the number who had not taken the trouble to safeguard themselves by submitting to revaccination.

Of these 349 cases 233 had been vaccinated at some period in their lives, and of these forty-seven died, making a rate of mortality of 20 per cent. There were ninety-seven who were unvaccinated, and of these fifty eight died, making the mortality rate in this instance 60 per cent.; while there were nineteen cases that were classified as doubtful, with eleven deaths and a mortality rate of 57 per cent. In the classification by age it was found that, out of a total of eighty-one children under 15 years of age who had the disease, twenty-four had been vaccinated and fifty-seven unvaccinated. Of the vaccinated children only one died. Among those who had not been vaccinated there were thirty-eight deaths. These facts, it is believed, show the fatality of the disease among young children and the protection afforded by primary vaccination, first, against attacks, and, second, against the fatal results of these. From the age of 15 to 20 there were fifty-five cases, forty-one had been vaccinated, fourteen unvac-

cinated. Among the vaccinated there was only one death, but seven, or just half, of those who had not been vaccinated died. The protection of vaccination to those above the age of 20 seems to have been somewhat less. Thus, ninety-nine of the cases recorded were between the ages of 20 and 30. Of these, eighty-one had been vaccinated, eighteen unvaccinated. Of the vaccinated eleven died, of the unvaccinated ten. Between the ages of 30 and 40 there were fifty-nine cases recorded, fifty-three vaccinated, six unvaccinated. Of these twenty died, sixteen vaccinated, four unvaccinated. Over the age of 40 there were fifty-five cases, forty-one vaccinated, fourteen unvaccinated, and of these a fatal ending came in the case of sixteen of the vaccinated and thirteen of the unvaccinated, the rate of mortality in the last-named instance being terribly great.

In the classification of sex there appears to have been rather more males than females, an experience possibly due to the greater chances of exposure. But it is also worthy of note that the London experience apparently indicates that after the age of 50 the liability to smallpox seems comparatively slight, and among these London recorded cases there is not one in which the patient had reached the age of 70.

As we said at the outset, the value of a presentation of this kind is found in the support it gives to the conclusion that vaccination is a safeguard, the effectiveness of which it is the height of folly to deny. It is not an absolute defence either against the disease or its fatal ending, though the experience in England among those under 15 years of age, where only one died, and this a child of over 10, seems to imply that this safeguard under the best conditions is an exceedingly potent one.

Of course, if smallpox could be absolutely eradicated there would be no need of this defence against its ravages, but so long as a large number of people in the world continue to live under only partly civilized conditions, which admit of the continuance and extension of this terrible disease, the rest of mankind must protect itself in the best way that it can by those means of defence which medical science has provided; and in view of the fact that this defence is but a partial one, while those who are unvaccinated add by their presence and the probability that they will be struck down to the danger of their neighbors, the community has the right to insist in this instance upon compulsory methods which under other conditions might be looked upon as infringements upon personal liberty.—The Boston Herald.

## ELECTRO-THERAPEUTICS IN CONSUMPTION.

Experiments are being made on a most elaborate scale in London with a modification of Tesla's high-frequency electrical current in the treatment of consumption. It is stated that some remarkable results have been achieved.

These experiments, for the most part, have been conducted by Dr. T. J. Bokenham, an eminent West End surgeon, in his private practice, but with the knowledge and approval of the leading consumption specialists. For various reasons, but principally because of evil results which might accrue if the system were used by any but the most experienced medical men, with a perfect knowledge of the forces they were dealing with, the experiments have been quietly conducted. Applications for details of the methods used have not been encouraged.

Dr. Bokenham has had fitted up a most elaborate apparatus for the production of electricity in the particular form in which it is used, the net result of which is that a current of 80,000 volts is produced, of such high frequency and administered in such small quantities that the consumptive patient may receive it without the slightest injury. The awe-inspiring force of this voltage may be best appreciated when it is remembered that only 500 volts are employed for driving trains on a railway. Yet the patient is not conscious of the enormous electrical pressure.

By one method of this treatment the patient is laid in a reclining position on a chair. The chest is laid bare, or partially bare. The back of the chair is insulated. Thus, when the patient receives the current from the electrical machine, a complete electrical current is established through the floor.

The current is applied from an electrical brush, held a few inches from the body. When the apparatus is set working electricity is discharged from the end of the brush with a loud cracking noise, there is a faint smell as of ozone, and a number of lines of electrical blue fire appear. Thus is the current passed through the chest, a slight warmth only being experienced by the person receiving it.

This is the monopolar method. By the other method, the one which Dr. Bokenham is inclined to favor, the patient, in the same posture as before, simply takes hold of a handle like that of an ordinary galvanic battery and receives the 80,000 volts till he is what is described as supersaturated with electricity. He feels nothing whatever, but if the attendant touches his skin sparks fly out in all directions. When he is using this treatment Dr. Bokenham pur-

posely applies his finger to the most affected parts of the patient's chest, thus concentrating the electricity there for the time being.

With both systems the application lasts from ten to fifteen minutes at a time. The treatment is undergone three or four times a week or daily. The first result is on each occasion that there is a pronounced rise in the patient's temperature. Usually it rises two or three degrees, but in at least one case the rise amounted to as much as six degrees.

The precise nature of the physical effect is a matter of some uncertainty at present, but the improvement in the patient in some respects is beyond all doubt. Dr. Bokenham's experience is that in very bad cases of consumption the cough has been greatly reduced, night sweats have disappeared, the appetite has improved and there have been a great gain in weight and general health. So that even if the consumption bacilli have not been destroyed it is certain that their virulence has been much decreased, that they have been brought under control and that the patient has felt cured.

A doubt entertained by phthisis specialists who do not question these temporary improvements is whether it is anything more than a mere exhibition. Dr. Bokenham, however, has great faith in the future of the system. In one case a remarkable result has been effected by it. A gentleman, after every sort of treatment, was to all appearances in the last stages of consumption. It was said he had no healthy lung tissue left to breathe with. His business had been abandoned. For a long period he had practically been confined to his room. He received the electrical treatment daily. To all appearances he has recovered and has resumed his professional work.

The questions now to be solved are as to the precise effect upon the bacillus tuberculosis of the 80,000 volts and whether the effect is in any way permanent.—Press Dispatches.

## THE HEREDITY OF TUBERCULOSIS.

It is surprising, how small, comparatively, is the experimental evidence concerning the transmission of tuberculosis from mother to offspring, especially when the great importance of the question of heredity transmission of the disease is considered.

D'Arrigo (Centralblatt fur Bakteriologie, Bd. xxxviii, No. 20) has performed some interesting experiments, the object of his investigations being to ascertain whether the tubercle bacillus was transmitted to the fœtus through the placenta. Guinea pigs were used, some inoculated before gestation and some afterwards. His conclusions are as follows:

1. Guinea pigs who become pregnant during an attack of tuberculosis sometimes abort, but not as a rule.

2. In the placenta and fœtus of guinea pigs which are examined from the sixteenth day of pregnancy up to a short time before term, histological changes and tubercle bacilli may be found

3. In the organs of young guinea pigs of tuberculous parentage, born at the usual time, especially in the liver, tuberculous lesions and bacilli are present. Such young pigs are always weak and thin, and soon die of general tuberculosis.

4. Impregnated guinea pigs which are inoculated with tuberculosis generally abort.

Friedman (Deutsche Mediciniche Wochenschrift, 1901, No. 9) differentiates between placental infection carried by the maternal circulation and conceptional, caused by the semen. In order to prove the latter method, Friedman, using a syringe the length of the erect penis, injected dogs after connection with a few drops of a sterile salt solution containing tubercle bacilli. The dogs were killed about a week after impregnation, and serial sections of the impregnated uterus examined. The majority of the tubercle bacilli were found in the embryonal cell layer. A few were observed between the embryonal layer and the zona pellucida, but only once were they observed within the zona pellucida. The organs of the mother were always healthy.

The experimental evidence quoted proves conclusively that tuberculosis may be inherited both from the male and female, but still leaves undecided how often such hereditary transmission actually occurs, and of how much real importance it is as a factor in the spread of this terrible scourge.

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On Tuesday evening, Jan. 21, the members of the old Douglas County Medical Society met at the office of Dr. G. W. Jones for the purpose of reorganizing in line with the Kansas Medical Society and the American Medical Association and to form a constitution and by-laws in conformity therewith and to secure a charter. The following officers were elected: President, S. W. Williston, M.D., Ph.D; Vice-president, Elizabeth Lazlett, M.D.; Secretary, G. W. Jones, M.D., Ph.D.; Treasurer, A. Gifford, M. D.; Committee on Credentials, A. W. Clark, M. D. A. M.; Carl Phillips, M. D.; E. E. Evans, M. D. We meet the second Tuesday of each month at 8 p. m.

GEO. W. JONES, M.D.,
Secretary.

# The Family Laxative.

The ideal safe family laxative, known as Syrup of Figs is a product of the California Fig Syrup Co., and derives its laxative principles from senna, made pleasant to the taste and more acceptable to the stomach, by being combined with pleasant aromatic syrups and the juice of figs. It is recommended by many of the most eminent physicians, and used by millions of families with entire satisfaction. It has gained its great reputation with the medical profession by reason of the acknowledged skill and care exercised by the California Fig Syrup Co. in securing the laxative principles of the senna by an original method of its own, and presenting them in the best and most convenient form. The California Fig Syrup Co. has special facilities for commanding the choicest qualities of Alexandria senna, and its chemists devote their entire attention to the manufacture of the one product. The name—Syrup of Figs—means to the medical profession "the family laxative, manufactured by the California Fig Syrup Co.," and the name of the Company is a guarantee of the excellence of its product. Informed of the above facts, the careful physician will know how to prevent the dispensing of worthless imitations when he recommends or prescribes the original and genuine Syrup of Figs. It is well known to physicians that Syrup of Figs is a **simple, safe** and **reliable** laxative, which does not irritate or debilitate the organs on which it acts, and, being pleasant to the taste, it is especially adapted to ladies and children, although generally applicable in all cases. Special investigation of the profession invited.

Syrup of Figs is never sold in bulk. It retails at fifty cents per bottle, and the name, Syrup of Figs, as well as the name of the California Fig Syrup Co. is printed on the wrappers and labels of every bottle.

**CALIFORNIA FIG SYRUP CO.**

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**Louisville, Ky.** **New York, N. Y.**

## EDITORIAL.

WE have recently received Volume IV of the eleventh series of the International Clinics, published by J. B. Lippincott Co. The International Clinics are all good. They were good at the beginning and have grown progressively better. They are neither text-books nor reviews but are selected articles written by scientific men on interesiing subjects, always interesting and valuable. One of them especially, the last one, would be good for anyone to have but all of them would be better. There are good articles on all manner of subjects, therapeutics, medicine, surgery, pædiatrics, dermatology, etc. Three hundred pages.

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A VERY timely Treatise on Smallpox to sell at $3.00 is announced for publication early in April by J. B. Lippincott Company. It is written by Dr. George Henry Fox, Professor of Dermatology in the College of Physicians and Surgeons, New York City, with the collaboration of Drs. S. Dana Hubbard, Sigmund Pollitzer, and John H. Huddleston, all of whom are officials of the Health Department of New York City and have had unusual opportunities for the study and treatment of this disease during the present epidemic. The work is to be in atlas form, similar to Fox's Photographic Atlas of Skin Diseases published by the same house. A strong feature of the work will be its illustrations, reproduced from recent photographs, the major portion of which will be so colored as to give a very faithful representation of typical cases of variola in the successive stages of the disease, also unusual phases of variola, vaccinia, varicella, and diseases with which smallpox is liable to be confounded. These illustrations number thirty-seven and will be grouped into ten colored plates, 9½ x 10¼ inches, and six black and white photographic plates. The names of Dr. Fox and his associates assure the excellence of the work, in which will be described the symptoms, course of the disease, characteristic points of diagnosis, and most approved methods of treatment.

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AMENORRHEA.—

℞ Strychninæ sulph., gr. ij.
Acidi oxalici, gr. ix.
Ferri peptonatis,
Magnesii lactat., aa ℥ j.
Ext. colchici compositi, gr. xxx.

M. et ft. cachets No. 60. Sig. One after each meal.—Bloom, Med. World.

## THE ETIOLOGY OF CARCINOMA.

Aloysius O. J. Kelly (Univ. of Penn. Medical Bulleton, Oct., 1901), in an elaborate review of the literature relating to the etiology of carcinoma, comes to the following conclusion: "Personally, while unwilling to deny that malignant tumors may be due to the pathogenic activities of lower forms of life, I believe that the proposition has not yet been proved, and that there are many facts known that speak against the likelihood of its ever being proved, at least with our present methods of investigation. In conclusion, I can not do better than quote the opinion of Zeigler: "The formations that have been described as protozoa and blastomyestes, are in reality degenerated nuclei, degenerated nuclear figures, various products of the cell protoplasm, such as mucus, colloid, hyalinx, heratohyalin, or cells, for instance, cancer cells, that have included leucocytes, or the products of their retrograde metamorphoses—the supporters of the parasitic theory of tumors are in reality decreasing in number—not only on account of the want of demonstration of the occurrence of tumor parasites, but also because all the biologic characteristics of tumors speak against their parasitic nature.'"

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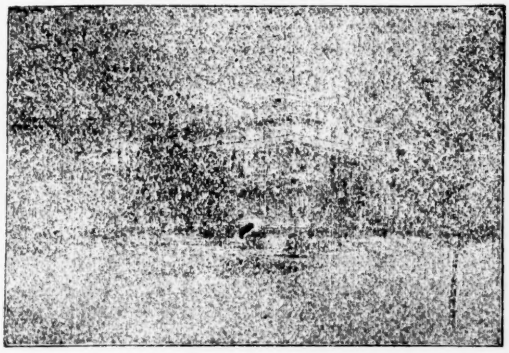

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